ALARIS
THE RF TECHNOLOGY GROUP
INSPIRING THE NEXT SOLUTION

Position

Title	Junior Antenna and RF Design Engineer
Department	Group R&D
Reporting to	Group CTO
Location	Lincoln, Lincolnshire, United Kingdom

Description

Alaris, the RF Technology Group, is expanding by opening a new R&D capability based out of our site in Lincoln, UK. A small, highly capable team will be established to work directly with the Group CTO on the most challenging design problems that the Group has to face and grow our product offerings in the RF and antenna system space.

We are looking for the best-of-the-best, motivated and energetic individuals to work on the most exciting new antenna and RF technologies. You will be working with customers based all over the world and collaborating closely with engineers based in our various sites in Europe, the USA and Africa. If your passion is to tackle difficult problems with an innovative and energetic spirit, then this is the place for you!

As a junior antenna and RF design engineer, you will work side-by-side with senior engineers to support the team's design activities on antenna and RF subsystems from HF to SHF frequencies as well as more complex mixed signal electronic systems. The opportunities to learn and develop your skills and engineering knowledge in a dynamic and fast-paced design environment will be significant.

We are looking specifically for individuals with a strong academic record and a high degree of personal resilience as the role will be demanding. Candidates should be open to occasional travel to our various sites.

Hard Requirements

Education (minimum)	Bachelor's degree in electronic engineering
Education (ideal)	Master's or PhD in electronic engineering
Minimum work experience	Recently qualified or upwards
Required nature of experience	Design experience in an electronic related field, specifically one involving electromagnetics or microwave/RF engineering
Computer literacy (required)	MS Office / Windows
Specialised computer literacy (ideal)	MATLAB CST / FEKO / HFSS / MWO / ADS or similar Eagle / Altium or similar
Language(s)	English

Soft Requirements

Bright, hardworking and be able to work independently and accurately
Work well under pressure and adhere to deadlines
Innovative and creative thinker
Keen to learn and develop themselves
Flexibility – prepared to work longer hours when critical work needs to be completed
Good understanding of electromagnetic theory and physics/mathematics
High levels of initiative
Effective problem-solving skills
Attention to detail
Hands-on practical skills in fabricating prototypes, building electronics systems, soldering and general DIY
Good oral and written communication skills
Logical thinker
Assertive nature

Key performance areas, weights and tasks

Area	Weighting	Tasks
Antenna product development	25%	• Initial design and simulation • Optimization of designs • PCB layout and detail design • Building of prototypes • Antenna measurements • Design handover and overseeing preproduction • Fault finding
RF product development	25%	• RF circuit design (filters, switches, amplifiers) • Detailed RF design and documentation • Identification and sourcing of RF components • PCB layout, population and construction of prototypes • Testing and qualification of RF designs • Design handover and overseeing preproduction • Fault finding
Mixed signal / System development	25%	• Basic digital control and power subsystem design • Custom testing hardware development • PCB layout, population and construction of prototypes • System performance modelling e.g. in MATLAB • Prototype system assembly and testing
Firmware / Software development	15%	• System performance modelling e.g. in MATLAB • Testing and design software development e.g. in MATLAB • Firmware development
Reporting and writing	10%	• Technical reports detailing simulation and test results for customer consumption. • Drafting of assembly instructions and user manuals • Assistance in developing technical presentations • Presenting of papers (e.g. at conferences)

About the Alaris Group

Founded in 1997, is a global radio frequency (RF) technology Group. The Group prioritises the creation of its own products and safeguarding its intellectual property. It delivers technologically advanced solutions and products to various sectors, including defence, aviation, marine, wireless, industrial, healthcare, research communities, and government institutes. The Group strives to become a dependable technical advisor and partner in the RF technology field, as reflected in its subsidiaries' customer-focused approach.

An acquisitive group, currently based in South Africa and until recently listed in the JSEx, the group is currently exploring the opportunity to relocate its holding company to the UK with a possible relisting on the LSE AIM in the future to assist drive its growth strategy.

5 January 2023